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# Introjected Regulation in Teachers' Professional Development Motivations

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## ABSTRACT

This article examines how teachers' professional development motivations are affected by introjected regulation. A theoretical thematic analysis of teacher interview and survey open response data is conducted, exploring the extent to which teachers perceive themselves to be motivated by factors such as self-esteem and the regard of others. Findings suggest that introjected regulation represents a potent yet complex motivator for working teachers in respect to their professional development. Given the extensive use of introjected regulation in the performative environment in which many teachers work, these findings thus have real contemporary relevance.

## ARTICLE HISTORY

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## 1. Introduction

This study seeks to explore the complexities of introjected regulation in respect to teachers' motivations to develop professionally. Introjected regulation represent a key motivational construct within the performative environment in which contemporary teachers work, and thus warrants serious consideration. At the outset, the broad context of teacher professional development is examined briefly, locating this in relation to the field of motivation. A summary of Self-Determination Theory (SDT) follows, before more detailed examination of the specific construct under consideration: introjected regulation. This concept is then explored in relation to data garnered from survey open responses and interviews, conducted with working teachers. Introjection proves an ambivalent construct in respect to teachers' developmental motivations, exhibiting both potentially positive and negative facets.

### 2.1 *New Public Management and Introjected Regulation*

It is important to contextualise motivational theory in contemporary teacher professional development. A critical concept here is 'New Public Management' (NPM), of real bearing on how professional development is perceived and understood in educational contexts. Tolofari (2005) describes 'NPM ... [as] characterised by marketisation, privatisation, managerialism, performance measurement and accountability' (p75), with such trends observable internationally. Wilkins et al. (2019, p. 148) are keen to emphasise NPM as an

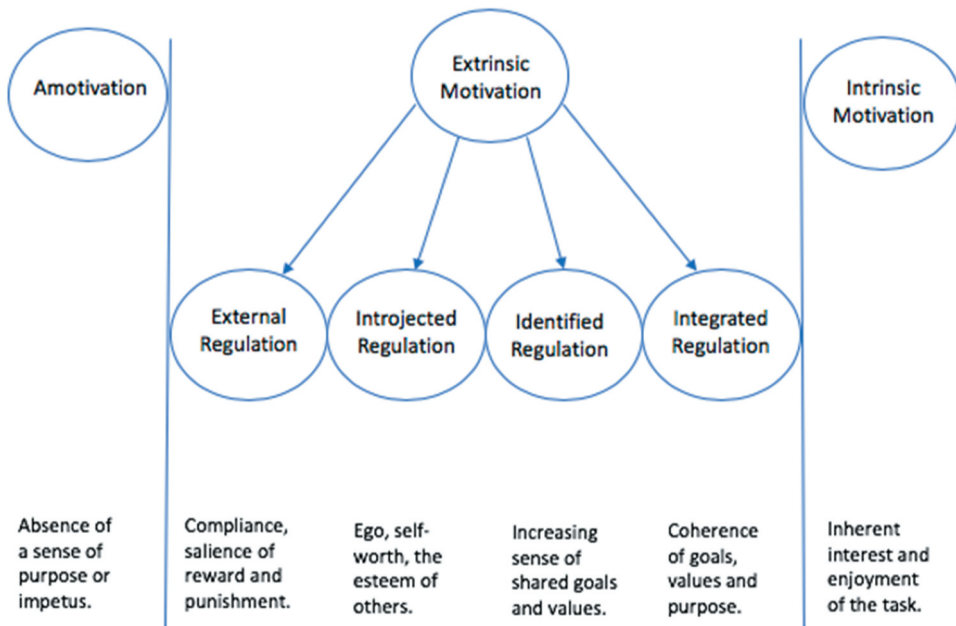
international policy agenda that can adapt to ‘the complex patterning and layering . . . within different geo-political settings’, whilst retaining the same essential ‘infrastructures, comparative-competitive frameworks, test-based accountabilities’ (Ibid. p147) across contexts. Both Hardy and Melville (2013) in England’s secondary age-phase context and Sullivan et al. (2020), in an Australian study of early-career teachers, note the impact of such NPM performativity on teacher professional development. Similarly, Cooper et al. (2021), in a cross-age phase study in the Australian context, describe professional development that is done *to* rather than *with* teachers, through managerialist mandate. Most crucially, Ryan and Weinstein (2009) offer the insight that such NPM reforms are ‘a motivational approach’ (p. 225), because of their emphasis on features such as competitive and comparative esteem and notions of relative self-worth (characteristics of introjected regulation). For this reason, Carr (2015) articulates a ‘pressing need to consider . . . motivational constructs’ (p. 1383) when examining teacher professional development in an era of widespread educational performativity. As such, teacher professional development can be powerfully understood by Self-Determination Theory (Ryan & Deci, 2020; Ryan & Deci, 2000).

## **2.2. Self-Determination Theory and Introjected Regulation**

Before considering introjected regulation specifically, an overview of SDT is appropriate. SDT considers not solely the amount of motivation, but how that motivation is orientated (Ryan & Deci, 2020; Ryan & Deci, 2000). The SDT continuum consists of six forms of motivation, ranging from more controlled to more autonomous, from ‘amotivation’ and ‘external regulation’, through to partially internalised ‘introjected regulation’ or ‘introjection’, and increasingly internalised ‘identified regulation’ or ‘identification’ and ‘integrated regulation’ or ‘integration’, through to fully ‘intrinsic motivation’. The characteristics of these constructs are noted in Figure 1. Importantly, SDT also posits that the extent to which motivation is internalised is related to three basic psychological needs: autonomy (personal volition); competence (sense of efficacy in a given context); and relatedness (sense of affiliation, derived from common goals/alignment of purpose; Ryan & Deci, 2020; Ryan & Deci, 2000).

This study focuses on introjection, or introjected regulation, which warrants further discussion. Ryan and Deci (2020, p. 3), describe ‘introjected regulation . . . [as] . . . partially internalized; behavior is regulated by the internal rewards of self-esteem for success and by avoidance of anxiety, shame, or guilt for failure’. This entails ego-involvement, whereby accomplishments are strongly associated with self-regard, or as Gagné and Deci (2005, p. 336) put it, ‘self-worth . . . [is] . . . contingent on performance’. Abós et al. (2018) offer helpful examples: ‘teachers who prepare their lessons well to avoid feeling bad about themselves’ (p22) or the sentiment that ‘I want others to think I’m a good teacher’ (p25).

However, introjection has proven a fraught motivational orientation, associated with surface-level, rather than in-depth engagement (Vansteenkiste et al., 2005). Likewise, Pelletier et al. (2001) and Vallerand et al. (1997) have noted positive short-term effects from introjected regulation in respect to task-persistence, but that these effects are not sustained, dwindling over time. Similarly, Losier et al. (2001) describe introjection’s association with inconsistent and uneven beliefs and actions. In regard to teacher



**Figure 1.** The Self-Determination Theory framework (adapted from Ryan and Deci, 2000; 2020).

motivation, Abós et al. (2018, p. 21) have identified the ‘greater risk of burnout’ for teachers associated with introjected regulation, a view shared by Friedman (2016). Yet McLachlan et al. (2011, p. 218) note potentially more positive ‘adaptive behavioural outcomes with introjected regulation’. In relation to teacher motivation specifically, Fernet et al. (2016, p. 488), observe ‘positive environmental factors ... [including] recognition’. Likewise, Friedman (2016, p. 631) notes the possibility of ‘healthy narcissism’ in teachers.

Other work differentiates between positive and negative introjection (Corpus et al., 2020, p. 3), distinguishing between ‘positive approach (i.e., seeking pride and self-worth) and more negative avoidance (i.e., avoiding guilt and shame) components’, a view supported by others (Assor et al., 2009; Sheldon et al., 2017). However, a positive side to introjected regulation could be contested when applied to teacher professional development. For example, Marent et al. (2020, p. 7) have described ‘the emotional labour involved in ... impression management ... [derived from the] ... motivation to behave as a model teacher’. Mahmoodi-Shahrebabaki (2017) also notes the associations between ego and esteem and perfectionism amongst teachers, linking this with anxiety and burnout.

The basic psychological needs (autonomy, relatedness and competence) posited by SDT (Ryan & Deci, 2020; Ryan & Deci, 2000) offer a further complication, particularly in respect to the notion of autonomy. McLachlan et al. (2011, p. 218) note that ‘autonomy-orientated individuals are likely to feel less controlled’ by factors such as shame. Such notions of autonomy also link to teacher agency and its value in relation to professional development (for example, Biesta et al., 2015; Sullivan et al., 2020). However, Turner et al. (2002), suggest that those who perceive external control over their performance, yet have

strong perceptions as to their own competence, are least susceptible to the negative effects of introjected regulation (perhaps because of a sense of self-regard in terms of competence). Korthagen (2017) describes the motivational dimension of teacher professional development and how this might be partly contingent on the fulfilment of these basic psychological needs, with the importance of teachers' need-fulfilment also underlined by Moè and Katz (2020), Kucsera et al. (2011), and Fernet et al. (2008) 'suggest that external and introjected regulations are probably less differentiated' (p274) as two forms of extrinsic motivation. Similarly, Gorozidis and Papaioannou (2014, p. 5) have found 'introjected and external regulations' to be 'significantly related' in respect to teachers' professional development orientations. Others offer sharper differentiation between external regulation and introjection in teacher motivation; Richter et al. (2019, p. 3) argue they are 'based on the same mechanism; however, rewards or sanctions are not provided by an external agency but through ... feelings of pride or internal pressure', thus in effect a partial internalisation of external impetuses. Yet whether partially internalised or not, Su et al. (2017) argue extrinsically-driven teacher professional development is less preferable to that pursued for more intrinsic reasons. Alternative blurring of motivational constructs might also occur; Assor et al. (2009, p. 483) suggest 'introjected *approach* motivation [could be] comparable to identified motivation', though their associated empirical work concludes that they are separable and the latter more beneficial.

Whether there is conceptual or empirical blurring between these categories of motivation or not, multiple simultaneous motivations are also possible. Ryan and Deci (2020, p. 4) argue that 'people can ... be simultaneously intrinsically motivated and identified for some actions, or both externally regulated and introjected'. Kaplan (2013, p. 61) likewise argues for an 'integrative' and 'dynamic' theorisation of teacher motivation. Richter et al. (2019, p. 8) note 'that teachers exhibit not just one motivational orientation to attend PD activities, but several different ones at the same time', a view echoed by others (Avidov-Ungar, 2016; Garner & Kaplan, 2019). This in turn raises whether introjected regulation might be more or less prominent within such a dynamic theorisation, with Gorozidis and Papaioannou (2014, p. 8) noting 'introjected regulation was represented in teachers' responses to a much smaller extent', contrasting with other studies related to teacher motivation where introjection was a more significant factor (Abós et al., 2018; Fernet et al., 2016; Marent et al., 2020). Such dynamism is also reflective of the extent to which teachers' motivations might be contextually dependent, with complex socio-ecological factors such as school practices and inter-personal relationships affecting teachers' work and dispositions.

In sum, given the complex and potent nature of introjection as a motivational construct, an exploration of its implications for teachers' professional development possesses considerable merit.

### **3.1 Theoretical Thematic Analysis**

Theoretical thematic analysis entails using a deductive approach to identify themes within qualitative data suggested by a given construct (Boyatzis, 1998). As Hayes (1997) notes, this 'offers a ... theory-driven approach ... with the flexibility and richness of qualitative analysis' (p113). Gorozidis and Papaioannou (2014) have shown the value

of Boyatzis (1998) three-stage approach to SDT-informed theoretical thematic analysis. Boyatzis (1998, p. 36) describes three stages: (1) to establish the themes ‘through reading and contemplation [of] the theory’, (2) to check the ‘compatibility with the raw information’ through pilot coding and (3) ‘to determine the reliability of the coder’ through inter-rater reliability testing. Pilot coding of an interview transcript indicated an applicable theory and ‘Measure of Kappa’ agreement was 0.874, representing robust inter-rater reliability (O’Connor & Joffe, 2020). This process was informed by Nowell et al.’s (2017) trustworthiness criteria, which recommends peer debriefing with an academic critical friend to ensure robust critique of themes. This pilot coding was reinforced by the subsequent suitability of its application to the wider data. These themes were recurrent across both data strands unless otherwise explicitly stated in the following analysis. Each is discussed in the following analysis, but briefly summarised here:

‘Social Esteem’: the regard that wider society has for the teaching profession, including the esteem of parents.

‘Hierarchical Introjection’: esteem derived from the approval of figures within the school hierarchy.

‘Collegial Introjection’: the esteem which teachers derive from the regard of their teacher-peers.

‘Self-Esteem’: motivation derived from a teacher’s own sense of self-worth.

‘Identification/Introjection’: the nexus between introjection and identification (sharing the sense of purpose of an activity).

### **3.2 Data Strands and Convergence**

The study employed two strands to generate qualitative data: survey open responses and semi-structured interviews, in both cases drawn from the English educational context.

For the survey open responses, an Initial Teacher Education university alumni email database was used for distribution, with the intent of gathering working teachers’ perspectives on their motivation to develop professionally. This database was employed so as not to approach teachers through their school hierarchies (thus eliminating the permission of managerial ‘motivators’ to approach the ‘motivated’). There were 323 respondents (respondent rate 9.8%), 59 of whom completed the open response section. A single open response prompt was employed: ‘Please use the box below to add any other thoughts that you wish’, appended to an 18 item Likert-scale survey measuring teachers’ perceptions of their motivations in respect to professional development (this quantitative element is analysed separately in another article). From these open responses, participants who made reference to introjected regulation (e.g., ego, esteem or perceptions of others) were selected for analysis.

For the second data strand, selection of participants for interviews was influenced by a range factors. Firstly, teachers were approached with varying years’ service, detailed below. Second, they were drawn from an approximately equal balance of different school age phases. A third factor was that they be typical cases, meaning participants were currently working in standard state education contexts in England. Finally, teachers were

selected through informal networks to enable a direct approach that was independent of school hierarchies; therefore, selection was in part contingent on the range of teachers within these informal networks.

Semi-structured interviews allowed teachers to take conversations in a range of directions in respect to their professional impetuses, within a broad topic of motivation, employing this schedule:

‘What makes you want to develop further as a teacher?’

‘To what extent are your motivations to develop shaped by the school you work in?’

‘Does performance management motivate you to be a better teacher?’

Importantly, such an approach was flexible and thus reference to introjection could occur in relation to each of the main prompts, but also allow emergent questions or discussion.

Convergent triangulation was employed (Creswell & Plano Clark, 2011), with both data strands generated in parallel. Interviews and survey responses were then analysed for introjection and subsequently cross-referenced. This process, however, was not strictly linear and involved iterations of analysis, reflecting the ‘messy’ complexity of qualitative data.

Participant are given below as Pseudonym, Years’ Service, Age Phase:

#### Survey Open Response Participants

Jane (1 yr, Primary)

Harry (1 yr, Secondary)

Lisa (9 yrs, Primary)

Kate (5 yrs, Secondary)

Claire (7 yrs, Secondary)

Mark (3 yrs, Secondary)

#### Interview Participants

Jo (4 yrs, Secondary)

Stuart (12 yrs, Primary)

Connie (6 yrs, Primary)

Melanie (2 yrs, Primary)

George (3 yrs, Secondary)

James (10 yrs, Primary)

Diane (9 yrs, Secondary)

## 4. Introjected Motivation: Analysis

### *Social Esteem*

Introjection, in some cases, was openly acknowledged as a motivator, but not solely as esteem derived within the formal school hierarchy:

*It is nice to be rewarded for hard work but a thank you from the boss or a parent works just as well. (Jane)*

It is interesting to note that parental approval can be a source of introjected motivation, which is something that sits outside the immediate gambit of formal performativity.

Another participant shared his perception of pursuing professional development in the form of a Master's degree as being motivated by the sense of esteem that it endowed in the broader social sense:

*I think the idea of having a qualification of a Masters to be honest because it is held in high esteem ... (James)*

This aspect emerged with another post-threshold teacher, who expressed similar sentiments in respect to wider social esteem. This was a little more ambiguous, with evidence of a perceived waning of the status of teachers in society:

*... you say, 'I'm a teacher', they say, 'oh wow!' and I think that's great, society still values teachers on the whole ... [though] definitely less. I don't think we're admired anymore' (Stuart)*

In summary, social esteem possessed some motivational traction for participant teachers, whether in the form of the regard of parents or academic standing, but with some noting a perceived reduced status in society as a whole.

### **Hierarchical Introjection**

Hierarchical introjection emerged as a significant motivator, though more in terms of teachers valuing the esteem of senior leaders rather than middle managers, who were seen as mediating or impeding this:

*They're [middle managers] stuck between a rock and a hard place and sometimes they do just want a bit of credit and they take it sometimes, even when it's not their work (Jo)*

Others noted a significant upturn in developmental motivation when praised by their headteacher. This is also interesting in relation to the SDT notion of the desire to be esteemed as 'competent':

*You're patted on the back, you're rewarded with praise and thanks ... I work hard for my head teacher ... I get a lot of praise, and I work on praise. (Stuart)*

*I think it's really important because if they don't hold us in esteem ... you want them to be confident ... that motivates you to do a better job. (Connie)*

There seems to be a clear sense here of teachers being motivated to 'improve' by the praise and esteem of their leaders.

However, another participant noted the demotivating nature of not being the recipient of such praise from their headteacher, suggesting that introjected motivation can also be felt by its absence:

*... the headteacher at the time ... didn't really motivate us as staff, I ... didn't feel like there was any praise where praise was due. (Melanie)*

Another participant noted that the esteem in which teachers are held by a school hierarchy possessed too strong an element of subjectivity, or was capricious in judgment:

*Sometimes it just seems to be whether the powers that be like you or not and what do they really base their opinions of your teaching on? (Kate)*



This is an intriguing strand, suggesting a negative form of introjection which could serve to demotivate.

There was also an occasional tendency to couch a sense of being motivated by the approval of school leaders alongside other more intrinsic motivations:

*It doesn't change my performance because I am ambitious for pupils to get good results but I would probably feel happier if I felt appreciated (Claire)*

*It is nice to be told you are doing a good job but having a happy total life is more important (Mark)*

This might be a reluctance to admit the motivating nature of introjection without some form of caveat or protective qualification. However, at face value, it suggests whilst introjection is not without motivational force, other more internalised impetuses have a greater traction.

In sum, hierarchical introjection is not without impetus for teachers, with a clear sense of the importance of headteacher praise for some participants. The absence of such approval appeared a demotivating factor, as did hierarchical praise of a capricious or biased nature.

### **Collegial Introjection**

Others offered an alternative source of introjected motivation, namely the esteem in which they were held by their teacher-peers:

*I am motivated by the thought of being held in high-esteem by department colleagues. (Harry)*

This suggests a potential avenue for the use of positive introjection by senior leaders, through fostering peer-to-peer relationships. Conversely though, it may be that such collegially-driven introjection lies outside the school hierarchy to some extent.

However, collegial introjection was also evident in a more negative sense, with teachers measuring their worth against their peers and competing with one another for esteem:

*... a sort of healthy competition that you want to be the same or better than other people ... (Jo)*

*I want to be the best. I do want to be. It's like anyone ... they want to be the best in their fields. (George)*

*I'm a very competitive person as an individual ... for me to improve as a teacher, I want to be the best I can. (James)*

Yet while an impetus, one teacher explicitly noted the possible flip-side, with competition for status/esteem having negative consequences in terms of wellbeing:

*... it makes them ill or anxious, shall we say; they can't cope with not being the one that everyone else is looking to or the one at the top of their game (Jo)*

In summary, collegial introjection appeared a potent motivator for participants, whether as the mutual regard of teacher peers, or a sense of 'healthy competition' amongst the same (though the latter may have negative possibilities).

## Self-Esteem

Some participants appeared driven to develop professionally by their own sense of self-worth, as differentiated from the worth they derive from others. Whilst such easy differentiation of self-worth and the approval of others may be too simplistic, it is worth noting one respondent did identify:

*No motivation other than own self-worth. (Lisa)*

Contextually, this was in relation to an environment where the teacher felt there was no sense of reward for individual effort, so this may be reflective of a particular (though perhaps not unique) situation.

For another teacher this manifested as a sense of self-worth being contingent on not being seen to fail, or more specifically, the sense of shame that he felt would accompany such ‘failure’:

*The very idea of failing in appraisal . . . I don't want to feel embarrassed that I didn't meet that target. (George)*

For others, this sense of self-esteem as a motivator came through as competing with oneself, with this ‘improvement’ driven by factors such as a pride in perfectionism:

*. . . personally I'm a perfectionist and that's the worst thing I think you can possibly be in this job. (Diane)*

*Myself. I'm competitive with myself. (Stuart)*

It is debatable whether notions of ‘competitiveness’ and ‘perfectionism’ and ‘expectation’ are healthy and sustainable impetuses, or deleterious (for example, risking burnout) or entail diminishing returns (because such motivations are not stable over time). Likewise, where self-esteem is linked to fear of failure or shame, similar issues arise. For some teachers though, self-worth that is not contingent on others appears a potent motivator.

## Introjection and Identification

A final point warranting analysis is there also appears to be a potential ‘tipping point’ for some, whereby introjection bleeds over into identification. This theme was more evident in the interviews than the open response data:

*I think it's a lot more balanced here cos there is that trust in the teachers. Yeah, I do feel there's that element of trust. (Diane)*

Here, it appears that the esteem of leaders blurs with notions of trust and greater autonomy, which in turn fosters a perception of mutual alignment. The basic psychological need of relatedness might also come into play, with shared purpose leading to a greater sense of affiliation.

Thus, in sum, this theme suggests a nexus between SDT's posited introjected and identified forms of motivation and thus perhaps a considerable potential impetus for professional development.

## 5. Discussion: Complexities of Introjection

Findings offered a rich hybrid of hierarchical, collegial, social and personal forms of esteem and thus introjection in its various forms did appear to have motivational traction for participants. Yet perhaps of greater debate is the extent to which introjection *ought* to motivate teacher professional development. Vansteenkiste et al. (2005) argue such motivation is associated with surface-level engagement and Losier et al. (2001) assert it is linked to inconsistency in beliefs and actions. Such perspectives were shared by some teacher-participants, who describe perceptions of the negative consequences of competing for the capricious esteem of managers and colleagues, or the dangers of self-worth being contingent on success in a role where ‘nothing is ever good enough’. This may lead to the effects observed by Pelletier et al. (2001) and Vallerand et al. (1997), whereby short-term motivational gains from introjection rapidly dwindle, thus also aligning with work identifying teachers’ emotional labour (Marent et al., 2020) or the risk of teacher burnout (Abós et al., 2018; Friedman, 2016; Mahmoodi-Shahrehabaki, 2017).

Yet some participants perceived introjection as a positive motivator for professional development, describing mutual collegial esteem as a particularly important factor, suggesting one possible underlying reason that collective participation and professional communities are significant to teacher professional development (Cooper et al., 2021; Dogan & Adams, 2020). Some described a kind of healthy competition and a desire to emulate those they admire professionally, with these being partly ‘internalised’ motivations. To this extent, findings may point to more positive associations observed in respect to introjected regulation elsewhere (Fernet et al., 2016; McLachlan et al., 2011). Autonomy may be an important variable here, with the idea of collegial esteem expressive of teacher-peers interacting in a professionally empowered or independent way. This links to McLachlan et al.’s (2011) view that autonomy can be a mediating variable, countering ideas like ‘shame’ or diminished social standing. Fernet et al. (2016) note a similar positive association between autonomy and recognition for working teachers. The sense of ‘relatedness’ derived from peer esteem could also be a factor.

Alternatively, such motivational traction could stem from the regard of others for a teacher’s competence. ‘Others’ here might denote collegial or hierarchical esteem, or derive from other quarters. Such a sense of competence might work in tandem with other basic needs such as autonomy, but there may be different directions of travel for autonomy and relatedness on the one hand, and competence on the other. Turner et al. (2002) argue the absence of autonomy can be counteracted by high self-perception in respect to competence. Yet for participants, the notion of competence seems complex, falling to some extent within the realm of performativity, in the sense of proving the degree to which one is satisfactorily competent (Kucsera et al., 2011; Moè & Katz, 2020). Perhaps, a valuable summation of the interplay between these ‘basic psychological needs’ is offered by Ryan and Deci (2000), who note the value of competence and relatedness, but add the caveat that ‘autonomy support is the critical element for a regulation being integrated rather than just introjected’ (p64). Irrespective of the specific dynamic, Korthagen’s (2017) observation that fulfilment of such needs is a significant factor in professional development would be supported by the present paper.

The distinction between ‘positive’ and ‘negative’ forms of introjection (Corpus et al., 2020; Sheldon et al., 2017) warrants reflection. The broad difference between sense of

self-worth (positive introjection) and guilt/shame (negative introjection) appears relevant to the present data, with the former significant in teachers' development motivations; Assor et al.'s (2009) partition of approach and avoidance forms of introjection is particularly pertinent here. Relatedly, the current study contributes to the debate as to whether introjection is a form of internalised motivation or more external in nature. Some studies have found blurring or association between external and introjected regulations (Fernet et al., 2008; Gorozidis & Papaioannou, 2014). The implication here is that introjection forms part of an external construct of motivation and the present study to some extent supports this, aligning with work which points to the negative impact of such 'control' on teachers (Abós et al., 2018; Marent et al., 2020) and on teacher professional development specifically (Cooper et al., 2021; Su et al., 2017). However, Assor et al. (2009) note alternative connections between introjected and identified forms of motivation, with elements of the present findings suggesting similar blurring in respect to some teachers' professional development motivations.

Indeed, Ryan and Deci (2000) describe introjection as a hybrid, noting it is a 'type of internal regulation that is still quite controlling because people perform such actions in order to avoid guilt or anxiety or to attain ego-enhancements or pride' in turn meaning 'although the regulation is internal to the person, introjected behaviours are not experienced as fully part of the self' (p62). This accords with the present study in terms of both introjection's potency as a motivator and the ambivalence with which it is perceived by teacher-participants. However, work in the broader field of the theorisation of motivation (Kaplan, 2013; Ryan & Deci, 2020) and in respect to teachers' professional development motivations (Avidov-Ungar, 2016; Garner & Kaplan, 2019; Richter et al., 2019) is relevant here, given the collective emphasis in these studies on multiple, simultaneous and dynamic motivational orientations.

## 6. Limitations

This study demonstrates the value of qualitative data in the examination of individual constructs related to SDT, supporting Ryan and Deci's (2020) call for more research in this vein. However, a potential limitation would be that this study considers teachers across a range of different contexts. Whilst in some ways a strength, a dedicated qualitative focus on 'low esteem' contexts could be recommended, for example, where an inspectorate has given a particularly negative judgment at a specific school. Another limitation of the present study is the relatively small sample size. Whilst this sample has generated rich data, more extensive empirical studies would be recommended.

## 7. Practical Implications

In terms of practical implications, considerable variation in the motivational dispositions of teachers suggests conscious use of introjection at a school level is challenging. Similarly, at the level of an individual teacher, complexities exist and it could not be assumed there are stable types in relation to introjected motivation. School leaders or others facilitating the professional development of teachers might also note associated practical dangers with introjection when it is located within the broader context of performativity and comparative-competitive esteem. This is not to say, however, that

introjected regulation is without merit in teacher professional development, as participants' references to motivations such as mutual collegial respect seem to possess real traction. In practice, however, this seems to originate from teachers themselves, or where enabled by leaders, in a manner which facilitates autonomy. Likewise, if such autonomy can be fostered by those facilitating professional development, this might also harness a potent nexus between identified and introjected forms of motivation for teachers. But guilt and shame can be seen as highly negative motivators for teacher professional development, which has significant practical implications, given the widespread use of such forms of introjection in the present performative environment. Potential consequences include risking burnout or diminishing returns (because such negative motivations are not stable) or indeed counter-productively demotivating teachers, disengaging them from professional development. Those involved in facilitating the professional development of teachers should thus exercise care even in the use of more positive forms of introjected regulation, if these might also offer a potential pathway to inverse negative forms of introjection such as guilt or shame. Equally, a departure away from the use of guilt and shame being employed solely in their own right by those involved in the professional development would be recommended most strongly. This includes cultivating a more conscious and critical awareness of when such negative forms of motivation are actually in use (as their common deployment might render them habitual or conventional). Finally, there should also be an onus on teachers themselves to be aware of their own positioning and stance in relation to negative forms of introjected regulation.

### Disclosure statement

No potential conflict of interest was reported by the author(s).

### Notes on contributor

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